

CLAIMS

- 1 1. A battery compartment configured such that opposing polarity terminals of adjacent
2 batteries contact each other, wherein the batteries are arranged such that a region of one
3 of the terminals that defines a minimum accessible portion of the terminal surface area is
4 the only point of contact between the two contacting terminals.
- 1 2. The battery compartment of claim 1, wherein the batteries comprise first and second
2 dry cell batteries and said minimum accessible portion of the terminal surface area is an
3 edge of a positive terminal button of said first battery.
- 1 3. The battery compartment of claim 1, wherein the batteries comprise first and second
2 miniature batteries, and said minimum accessible portion of the terminal surface area is
3 an edge of a positive terminal casing of said first battery.
- 1 4. The battery compartment of claim 2, wherein the first and second batteries each have
2 a casing with positive and negative terminal surfaces on opposing ends of the batteries,
3 said casings defining a longitudinal battery axis substantially orthogonal to each terminal
4 surface, wherein when installed, the longitudinal axes of the first and second batteries lie
5 in a same plane and intersect each other.
- 1 5. The battery compartment of claim 3, wherein the first and second batteries each have
2 a casing with positive and negative terminal surfaces on opposing ends of the batteries,
3 said casings defining a longitudinal battery axis substantially orthogonal to each terminal
4 surface, wherein when installed, the longitudinal axes of the first and second batteries lie
5 in a same plane and intersect each other.
- 1 6. The battery compartment of claim 1, wherein the battery compartment is constructed
2 and arranged to cause said region of said minimally accessible surface area of one of the

3 adjacent batteries to forcibly scrape against said negative terminal of the other one of the
4 adjacent batteries.

1 7. A battery compartment for at least two batteries each having a casing with positive
2 and negative terminal surfaces on opposing ends thereof, said casing of each said battery
3 being transected by a longitudinal battery axis substantially orthogonal to said positive
4 and negative terminal surfaces, wherein the installed batteries are serially aligned in
5 terminal contact with each other such that their respective longitudinal axes intersect each
6 other.

1 8. The battery compartment of claim 7, wherein the at least two batteries includes a first
2 and a second battery, wherein said positive terminal of said first battery is in contact with
3 a negative terminal surface of said second battery, wherein said negative terminal surface
4 of said second battery is not parallel with said positive terminal surface of said first
5 battery when said first and second batteries are installed in the battery compartment.

1 9. The battery compartment of claim 7, wherein said batteries are dry cell batteries.

1 10. The battery compartment of claim 9, wherein said positive terminal surface of said
2 first battery is in the form of a button protruding from said casing, said button having a
3 substantially planar top surface with a edge around the periphery thereof, and wherein
4 said region of said positive terminal surface is said edge of said positive terminal button.

1 11. The battery compartment of claim 7, wherein said batteries are miniature batteries.

1 12. The battery compartment of claim 11, wherein said positive terminal surface includes
2 a casing of said miniature batteries, wherein said region of said positive terminal is an
3 edge of said casing.

1 13. The battery compartment of claim 8, wherein the battery compartment is constructed
2 and arranged to cause said region of said positive terminal to forcibly scrape against said
3 negative terminal of said second battery.

1 14. The battery compartment of claim 9, further comprising:

2 positive and negative device contacts installed in opposing ends of the battery
3 compartment to contact a positive terminal of a battery last in the series of one of the at
4 least two installed batteries and a negative terminal of a battery first in the series of one of
5 the at least two installed batteries.

1 15. The battery compartment of claim 14, wherein said device contacts comprise a tab
2 negative contact having an orthogonal surface vector that intersects said longitudinal axis
3 of one of the at least two installed batteries.

1 16. A battery-powered device comprising:

2 a power consuming component; and
3 a battery compartment for electrically connecting at least two standard dry cell
4 batteries in a serially aligned arrangement, each said dry cell battery including a casing
5 with a substantially planar negative terminal surface and a raised positive terminal button
6 with a planar top surface and edges around the periphery thereof, wherein only said
7 positive terminal button edge of a battery in a second series battery position contacts said
8 substantially planar surface of a negative terminal of a battery in a first series battery
9 position.

1 17. The battery-powered device of claim 16, wherein a longitudinal axis of said second
2 battery intersects a longitudinal axis of said first battery.

1 18. The battery-powered device of claim 17, wherein the battery compartment is
2 constructed and arranged to cause said positive terminal edge of said battery in said

3 second series battery position to forcibly scrape against said negative terminal of said
4 battery in said first series battery position as said batteries are installed into the battery
5 compartment.

1 19. The battery-powered device of claim 18, wherein said battery compartment further
2 comprises:

3 a positive device contact secured in said battery compartment so as to contact said
4 negative contact of said battery in said second series battery position, and

5 a negative device contact secured in said battery compartment so as to contact said
6 positive contact of said battery in said first series battery position.

1 20. The battery-powered device of claim 19, wherein said negative device contact is a tab
2 contact having an orthogonal surface vector that intersects said longitudinal axis of said
3 battery installed in said first series battery position.